

ABSTRACT OF THE DISCLOSURE

A method of making a printing plate in which the uncoated surface of a substrate is treated with a pre-treatment solution prior to the deposition of ink on the surface. The pre-treatment liquid comprises a polyvalent metal salt, and at least one of an organic swelling reagent and/or a coalescence reagent. The pre-treatment liquid is applied to form a thin, homogenous layer of approximately 4 μ m to the entire upper surface of the recording plate. The swelling reagent and/or the coalescence reagent and the polyvalent metal cations are physically well localized in the porous structure of the plate's surface. After partial drying of the pretreated anodized aluminum plate, CTP liquid is deposited onto the surface to form an image. The CTP liquid solids react with the pre-treatment liquid and are, therefore, chemically bound to the surface. This allows all data to be deposited in a single pass of the inkjet head without the problem of clustering.